



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,486	12/04/2003	Yuji Ishihara	2003_1747	7546
513	7590	12/20/2005	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			TRUONG, TAMTHOM NGO	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			1624	

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/726,486

Applicant(s)

ISHIHARA ET AL.

Examiner

Tamthom N. Truong

Art Unit

1624

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12-4-03 (Prelim. Amdt).  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 26-29 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/787,288.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/4/03; 7/13/04; 8/8/05

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicant's preliminary amendment of 12-4-03 has been considered. Claims 1-25 are cancelled.

Claims 26-29 are pending.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 26, 28 and 29 are rejected under 35 U.S.C. 102(e) as being inherently anticipated by **Kawakita et. al.** (US 5,864,039 cited on IDS). On column 18, Kawakita et. al. disclose

Art Unit: 1624

several compounds (e.g. compounds on lines 32 and 34) that are *non-carbamate amine* compounds. The disclosed compounds can also treat an urinary disease such as *dysuria* (see column 76, line16), and thus reads on claims 28 and 29. Since said compounds can treat dysuria, it is understood that they can *improve excretory potency of a urinary bladder as well*, and thus the *acetylcholinesterase-inhibiting* action would be inherently disclosed by the structure of the compounds and the underlying factor of *dysuria*. Therefore, Kawakita's method inherently anticipates claim 26.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the following references in view of **Tobin et. al.** and **Lai et. al.**:

- a. **Pang et. al.** (US 5,783,584): On column 1, Pang et. al. disclose the second compound (or 9-amino-1,2,3,4-tetrahydroacridine, commercially known as COGNEX) of the instant claim 27;
- b. **Yu et. al.** (US 5,177,082 – cited on IDS): On column 16, Yu et. al. disclose a compound in Example 1 (or Huperzine A) which reads on the third compound of the instant claim 27.
- c. **Renko et. al.** (US 5,958,903): On column 1, Renko et. al. disclose a galanthamine compound (commercially known as NIVALINE<sup>TM</sup>) that reads on the fourth compound of the instant claim 27.

The above references associate the disclosed compounds with acetylcholinesterase inhibitors. However they differ from the instant claim 27 by applying those compounds to the treatment of Alzheimer's disease, dementia or myasthenia gravis (as in the case of Huperzine A). Such a difference can be overcome by the teaching of **Tobin et. al.** and **Lai et. al.**

Tobin et. al. identify three acetylcholine (or muscarinic) receptors that affect a bladder, namely: M<sub>1</sub>, M<sub>2</sub>, and M<sub>3</sub>. Lai et. al. further reveal that : "*activation of M<sub>2</sub> receptor indirectly contributes to bladder contraction...*". Therefore, from the relationship of muscarinic receptors with urinary bladder taught by Tobin et. al. and Lai et. al., the skilled medicinal chemist would have been motivated to treat *dysuria* (as recited in the instant claims 28 and 29) by *improving*

Art Unit: 1624

*excretory potency with a cholinesterase inhibitor* (as recited in the instant claim 26) such as those disclosed by Pang et. al., Yu et. al., or Renko et. al.

Thus, at the time that the invention was made, it would have been obvious to develop a method as claimed herein in view of the combined teachings above.

-----  
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*

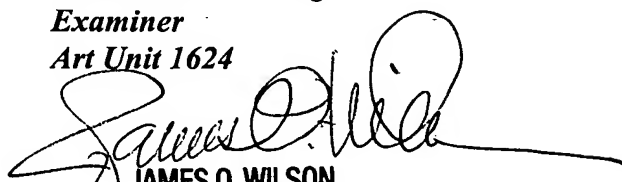
12-7-05



**Tamthom N. Truong**

**Examiner**

**Art Unit 1624**



**JAMES O. WILSON**

**SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600**